

# SPARK GAP

**Vol. 33, Issue 9, September 2016 MARC - Serving Central Indiana Communities for thirty-three years**

## *On our MARC:*

I'd like to thank Bruce Tisdale, Rhonda Curtis, Cy Young, and Chris Frederick for a great job. I would also like to thank the IT Team for working hard on getting our Website re-designed and up to date and the PIO Team for getting our name out there to the public and coming up with ways to get all the members involved and working on things to get old members back. Thanks to Bob LaGrange for serving as editor-in-chief of the Spark Gap. Thanks to the membership for all the support that you have given the club.

A big thanks to those that came out to Heartnut. Weather was good except for the few storms we had on Saturday. Sunday was beautiful. Set up was a little different this year. This was the year of the vertical. Steve Carmean and Bruce Tisdale set up "Ventenna" vertical antennas. Ron Schuetz brought his tripod mounted, all band "Alpha" vertical antenna. All three did very well making contacts, even with poor band conditions. They made several "DX" contacts. Everyone operated using battery power this year. Jack Parker tried PSK.

Just a reminder, that our yearly picnic is Sept 15<sup>th</sup> at Steve Brown's house. Club will provide the meat, lemonade, ice tea and water. Please bring a side dish and chairs. Also, if you haven't mailed or emailed your ballots, please don't forget to bring them to the picnic to hand to Rhonda. Hope to see everyone there.

Jacki – KI6QOG  
*President*



*Birthdays for the month of Sept:*  
*KC9OAE-Stephanie Brown*  
*W9DBA-Scott Nelson*  
*KA9YKN-William Spann*

## M.A.R.C. Officers for 2016-2017



V.P. - Bruce K9ICP, Pres.- Jackie KI6QOG, Sec. - Rhonda -WS9H, Tres.- Marlys KD9BHM, Trustee - Chris – KQ9Y

Congratulations to the MARC officers for 2016 – 2017!

.... photo by Kevin K9NTZ

### APRS CLASS .....

**We will be conducting an Introduction to APRS class on Tuesday October 4th at White River Twp Station 51 beginning at 6:30pm. The Automatic Position Reporting System is used primarily on 2-meter radios across the country and around the world. Practical applications include tracking mobiles, reporting current weather conditions and texting short messages from your HT or mobile radio.**

**Please let me know If you can attend the class. We should have a good time learning how to play with this active/passive mode of Amateur Radio.**

**Send your RSVP to [W8ISH@arri.net](mailto:W8ISH@arri.net) or to [jparker1948@outlook.com](mailto:jparker1948@outlook.com).**



## **NEW MEETING LOCATION FOR M.A.R.C.**



**Beginning with the November 19, 2016 club meeting we will move to the headquarters of Johnson County REMC. The new location is located at 750 International Drive, on the north side of Franklin.**

**This meeting facility will accommodate our future growth plans for MARC. The room will hold at least 200 people and has first class audio/video equipment and screen. There are plenty of tables and chairs to facilitate the meeting and VE testing. Their large kitchen has everything we need for Saturday morning coffee, donuts and the annual Christmas party pitch-in.**

**We look forward to establishing our new meeting place at the Johnson County REMC headquarters Talk-in will be on 146.835. See you there beginning November 19th.**  
**-W8ISH**



## JOHNSON COUNTY HEARTNUT FESTIVAL 2016



Scott and Steve making contacts at the Johnson County Heartnut Festival.

Heartnut camp out 9-11-2016

Several waves of late summer showers kept our Heartnut Festival campers guessing about the next weather change. When Bruce-K9ICP, Steve-K9DY and Jack-W8ISH began setup in the pre-dawn hours September 10th, light morning rains made for a soggy setup. With the help of early arrival Scott-W9DBA two pop up tents established our two tent radio encampment.

Ron-K9THR added another table, radio and antenna to the field operation. A total of four HF and two dual band antennas made up our working antenna farm. Bruce worked 40 meters hoping to add more National Parks on the Air contacts to his impressive list of over 300 park contacts. Steve was searching for parks and special events stations on 20 meters. Ron scanned the other bands looking for contacts. With an HF radio and laptop computer in hand, Jack demonstrated PSK31 and APRS digital modes.

Rusty-N9LLP showed off his newly designed club flyer along with reams of ham radio information pamphlets. Kevin-K9NTZ supplied lots of breakfast snacks, chips and lunch hotdogs to keep our army of radio operators fed. It was like a picnic in the park.

Over a dozen MARC club members stopped by over the weekend to help promote amateur radio. Their numbers were exceeded only by the number of curious visitors to our tents. Those visitors included lots of boy and Girl Scouts, plus newly licensed hams and several long time club members looking to explore digital and HF communications.

The Saturday operation weathered several strong wind and rain fronts moving through the state. Those showers gave way to lower temps and a beautiful sunny Sunday making the 2016 Heartnut Festival a huge success.

**-W8ISH**

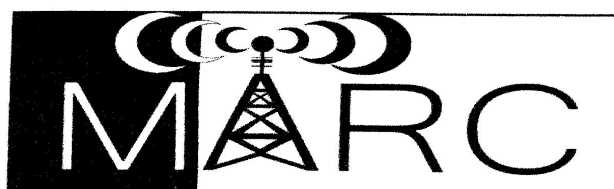




Talk'n HT's at the Heartnut Festival



Jack and Ron running HF digi.





## HAMS HELPING HAMS

Hams helping hams! Here are some photos of Jack W8ISH, and Steve K9DY, working on Brenda KC9EBL's HF antenna, round one. Now a new antenna is ordered and a plan is being formulated. Stay tuned for the rest of the story.



Jack – W8ISH & Steve K9DY doing some antennae work.

# Antennae Work at the New Radio Room

..... pics and story by Chris - KQ9Y



90 foot tower. Mike Rose, KC9WLR, removing old antennae making room for Amateur Radio antennae. Old Franklin, IN police dispatch tower. Now the Mid-State Amateur Radio Club tower.





## HIGHER BANDS WILL PICK UP THIS FALL

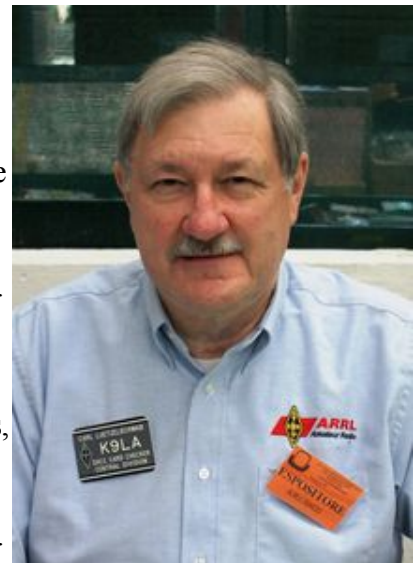
### Higher Bands Will Pick Up this Fall, Data Suggest Smaller Solar Cycles Lie Ahead

Propagation guru Carl Luetzelschwab, K9LA, says that, while conditions on 12 and 10 meters will pick up as they always do in the fall, F2 propagation on those bands will decline thereafter, with only sporadic E during the summer months as a possible saving grace. On the other hand, the lower bands -- 160, 80, and 40 meters -- should be good going forward, and 20 and 17 meters will be the mainstays of daylight HF propagation. Luetzelschwab offered these observations during an August 23 World Wide Radio Operators Foundation ([WWROF](http://www.wwrof.org))-sponsored [webinar](#) "Solar Topics -- Where We're Headed." He said data suggest that Solar Cycle 24, the current solar cycle, will bottom out in 2020, and he advised that radio amateurs may need to lower their expectations on the higher bands (and 6 meters) looking beyond that.

"I think the only conclusion we can make with some confidence is that we are headed for some small cycles," he told his audience. He cited various evidence related to the Sun's polar fields -- which appear to be decreasing in strength, A index trends, and cosmic ray data to support his assertion. Luetzelschwab cautioned, however, that past performance does not necessarily predict future performance.

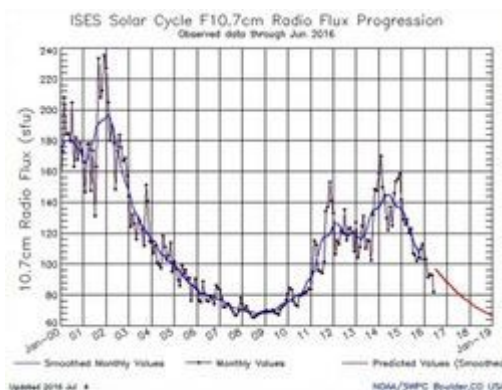
"There seems to be a good correlation between how long a solar minimum is and the next solar cycle," said Luetzelschwab. "The longer you spend at solar minimum, the smaller the next cycle."

He observed that hams active since the 1950s and 1960s have experienced short inter-cycle solar minimums of approximately 2 years, until the one between Solar Cycle 23 and Solar Cycle 24, which lasted about 4 years. He also allowed that the science is not fully understood, and that some things appearing to be patterns may just be coincidences.



On the other hand, he said, it looks like the downward trend of disappearing sunspots has leveled off, suggesting that Solar Cycle 25 may see a lower smoothed sunspot number as opposed to zero or near-zero sunspots. **Carl Luetzelschwab, K9LA.**

Counting those sunspots can be a subjective business. "That's a tough job," he said of the task, noting that it appears observer bias also has been a factor over the years, affecting historical sunspot data. "We now have new corrected data that are believed to be more accurate."



Luetzelschwab's article "The New Sunspot Numbers," appearing in the October issue of *QST*, discusses the new sunspot numbers.

Luetzelschwab cited historical sunspot cycle data going back centuries -- including the "Maunder Minimum" of zero and near-zero sunspots between the years 1645 and 1715 and a later, less-drastric "Dalton Minimum." He pointed out that over the last 11,000 years, 19 notable grand maximums -- including Solar Cycle 19 and the cycles around it -- and 27 notable grand minimums were recorded. "We're likely to have more of both grand maximums and grand minimums in the future," he predicted.

**A chart of 10.7 centimeter solar flux from 2000 to 2016. [NOAA Space Weather Prediction Center graphic]**

The current system of numbering sunspot cycles begins with Solar Cycle 1 in the mid-18th century. "We don't fully understand the process inside the Sun that makes solar cycles," Luetzelschwab said. "Thus, you should exercise caution with statements seen in the news."

..... ARRL NEWS September 2016

## BITS, PIECES AND PARTS .....

The annual ARES Simulated Emergency Test also known as S.E.T. will take place on Saturday, October 8<sup>th</sup> in the morning about 1000 hrs local. This is a required communication test and will have a different scenario that would be applicable to Johnson County. All ARES/RACES and licensed amateurs are encouraged to participate in this exercise.

The exercise is designed to test our communication skills during a time of an emergency or disaster conditions. The SET will involve only our ARES/RACES members as well as other amateurs that want to participate. No other government entity or local public safety group will be part of this exercise but may be mentioned in the scenario.

It would be good during this exercise that our stations run on emergency power and/or batteries to test our portability at our homes and other places in the county.

There will be more information coming in the next week concerning this exercise so please watch your email for details.

73 for now, ..... Bob N9SIU Johnson County ARES EC

## Buy, Sell or Trade .....

If you have an item that you would like to sell, or trade, or looking for that certain piece of equipment, you can have it listed in the Spark Gap. Just drop me an email and I can list it here.

### For Sale:

Icom IC-756 Hf +6mtr \$550

Yaesu FT-8100 in box excellent condition. \$200

Contact ----- Bernie KB9AWS ----- Ph#: 317-881-7373

# **UP – COMING ACTIVITIES AND HAMFESTS**

**09/10/2016 – Johnson County Heartnut Festival, MARC demo to public of HAM Radio**

**09/17/2016 – Bloomington ARC Hamfest**

**Location: Monroe County Fairgrounds, 5700 West Airport Road, Bloomington, IN 47401**

**Sponsor: Bloomington Amateur Radio Club**

**Website: <http://www.bloomingtonradio.org>**

**09/17/2016 1130 – MARC Monthly meeting and annual picnic at the Steve Brown, K9LC Ranch, Election of Club Officers for 2016-2017.**

**09/24/2016 1130 – MARC Public Service to provide parking and public safety assistance for the Greenwood HS Marching Band Invitational. This is an all day and evening event and need many amatures to assist. More information at the club meeting and sign up for the event available.**

**POC Bob N9SIU [n9siu@yahoo.com](mailto:n9siu@yahoo.com)**

**10/15/2016 0800 – MARC Monthly club meeting at the New Johnson County EOC, Johnson County Law Enforcement Center.**

**10/31/2016 – Goblin Patrol TBA**

**11/19/2016 0800 – MARC Monthly club meeting at the New Location, Johnson County REMC 750 International Drive Franklin, IN 46131.**

**11/12/2016 – Indiana State Convention**

**(Fort Wayne Hamfest & Computer Expo)**

**Location: Allen County War Memorial Coliseum, 4000 Parnell Avenue, Fort Wayne, IN 46801**

**Sponsor: Allen County Amateur Radio Technical Society**

**Website: <http://www.fortwaynehamfest.com>**

**12/17/2016 0800 – MARC Monthly club meeting and Christmas Pitch-in Breakfast at the New Location, Johnson County REMC 750 International Drive Franklin, IN 46131.**

**01/21/2016 – MARC Monthly club meeting at the New Location, Johnson County REMC 750 International Drive Franklin, IN 46131.**



# MID-STATE AMATEUR RADIO CLUB

The Mid-State Amateur Radio Club meets the **THIRD SATURDAY** of each month in the New Johnson County EOC 1111 Hospital Road, Franklin, Indiana 46131.

See our website, [www.midstatehams.org](http://www.midstatehams.org), for maps on how to get to our meeting.

Everyone is welcome; you do not have to be a *HAM* to attend our meetings or a member of the club.

## WA9RDF Repeaters:

146.835/  
146.235 MHz  
(151.4 Hz PL Tone)

## Club Officers:

President: Jacki Frederick – KI6QOG  
Vice President: Bruce Tisdale -- K9ICP  
Secretary: Rhonda Curtis – WS9H  
Treasurer: Marlys Barr – KD9BHM  
Repeater Trustee - Chris Frederick – KQ9Y

## WA9RDF Repeater:

443.525/  
448.525 MHz  
(151.4 Hz PL Tone)

Weekly Net: Sunday evening 7:00 PM ARES/RACES members and ALL RADIO AMATEURS  
146.835/146.235 MHz (151.4 Hz PL Tone)

The Official Newsletter of the Mid-State Amateur Radio Club

P.O. Box 836  
Franklin, Indiana  
46131

Spark Gap Editor: Robert LaGrange N9SIU

Please send your articles to my email: [n9siu@yahoo.com](mailto:n9siu@yahoo.com) no later than the 3rd of the month

**Please see Marlys Barr KD9BHM at the meeting Saturday if you would like to become a member of our club.**

